

## **CLAIMS**

1. (Previously presented) A method for reducing image noise in a scanned image, comprising:

decreasing a color level of the scanned image by reducing a number of bits of a full color level of one or more pixels in the scanned image to form a reduced color level image;

composing a pattern having less color level than the full color level; and

recombining the full color level of the one or more pixels in the scanned image by combining the reduced color level image with the pattern.

2. (Previously presented) The method for reducing image noise of claim 1, wherein the reduced color level image and the pattern are combined using a bit enhanced method.

3. (Previously presented) The method for reducing image noise of claim 1, wherein combining the reduced color level image with the pattern restores the one or more pixels to include a same number of bits as before the color level is decreased.

4. (Previously presented) The method for reducing image noise of claim 1, wherein the pattern comprises a halftone pattern.

5. (Previously presented) The method for reducing image noise of claim 1, wherein the number of bits reduced from the full color level is set to an image noise level.

6. (Currently amended) A method for reducing image, wherein the image is composed of a plurality of pixels having a scale of bits, comprising the steps:  
reducing a plurality of bits of the scale of each pixel in the image; and  
recombining the scale of each pixel in the image, wherein the step of recombining the scale of each pixel in the image comprises a halftone pattern method, wherein a pattern composed by the halftone pattern method is a matrix pattern, and wherein the row and column numbers of the matrix pattern are dependent on the number of bits reduced in the step of reducing a plurality of bits of the scale of each pixel in the image.

7. (Previously presented) The method for reducing image noise of claim 1, wherein the color level of the pattern depends on the number of bits reduced from the full color level.

8. (Previously presented) A method for reducing noise in an image, comprising:  
reducing a full image level of one or more pixels in the image by decreasing a number of bits according to the image noise;  
composing a halftone pattern with a reduced image level corresponding to the decreased number of bits; and  
recombining the image level of the one or more pixels in the image using the halftone pattern.

9. (Previously presented) The method for reducing noise of claim 8, wherein a number of bits in the recombined image level is the same as a number of bits in the full image level.

10. (Previously presented) The method for reducing noise of claim 8, wherein the halftone pattern comprises a matrix having a number of rows equal to the decreased number of bits.

11. (Previously presented) The method for reducing noise of claim 10, wherein the matrix further has a number of columns equal to the decreased number of bits.

12. (Previously presented) The method for reducing noise of claim 8 further comprising displaying the image including the recombined image level on a computer monitor.

13. (Previously presented) The method for reducing noise of claim 8, further comprising filling out missing codes of the one or more pixels of the image using a bit enhance method.

14 – 17. Cancelled

18. (Previously presented) An apparatus comprising:  
means for reducing a full image level of one or more pixels in the image by decreasing a number of bits according to the image noise;  
means for composing a halftone pattern with a reduced image level corresponding to the decreased number of bits; and

means for recombining the image level of the one or more pixels in the image using the halftone pattern.

19. (Currently amended) The apparatus of claim 18, wherein a number of bits in the recombined image level is the same as a number of bits in the full image level.

20. (Currently amended) The apparatus of claim 18, wherein the halftone pattern comprises a matrix having a number of rows and columns equal to the decreased number of bits.

21. (New) The apparatus of claim 18, wherein recombining the image level restores the one or more pixels to include a same number of bits as before the full image level is reduced.

22. (New) The apparatus of claim 18, wherein the number of bits decreased from the full image level is set to the image noise level.

23. (New) The apparatus of claim 18, wherein the reduced image level of the pattern depends on the number of bits reduced from the full image level.

24. (New) The apparatus of claim 18, wherein the image level comprises a color level.